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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,653	10/31/2005	Joel Queirel	0584-1031	6277
465 7590 02/21/2008 YOUNG & THOMPSON 745 SOUTH 23RD STREET 2ND FLOOR ARLINGTON, VA 22202			EXAMINER MYERS, JESSICA L	
			ART UNIT 3746	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/532,653

Applicant(s)

QUEIREL, JOEL

Examiner

JESSICA L. MYERS

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4124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)
- Paper No(s)/Mail Date 4/25/05
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Inventor's Patent Application
- 6) ☐ Other: _____

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "concrete block" of claim 10 and the cleaning device for swimming pools" of claim 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 3, 4, 6, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,616,980 to Carpenter (Carpenter).

In Reference to Claim 1

Carpenter teaches an electrically driven pump for the maintenance of swimming pools (see figure 1), characterized in that it comprises an electric motor (motor, made up of rotor (22) and stator (30)) having a drive shaft (main shaft (10)), the shaft having, at each of the axial ends thereof, a shaft output and two pump impellers, each shaft output driving a respective pump impeller (see column 2, lines 19-28, and columns 2-3, lines 64-4), the first of the impellers operating at a low pressure and high flow rate, and the second of the impellers operating at a higher pressure and lower flow rate (see column 3, lines 15-29, where the main impeller (8) gives the fluid velocity, and the auxiliary impeller causes an increase in pressure).

In Reference to Claim 2

Carpenter teaches the pump according to claim 1 (see the rejection of claim 1 above), characterized in that the water pumped by the second pump impeller circulates

around the motor in order to cool the motor ("by the rotation of auxiliary impeller (48) by shaft (10) the fluid receives an increase in pressure which causes it to flow through the motor, thereby cooling the motor and bearings (24, 25)," see column 3, lines 15-29).

In Reference to Claim 3

Carpenter teaches the pump according to claim 1 (see the rejection of claim 1 above), characterized in that the water pumped by the second pump impeller is drawn off close to the outlet of the first pump impeller (it is drawn off from high pressure portion (6) via secondary portion 6" which leads to recirculation line (50), see figure 1) and returns to the inlet of the second impeller (recirculation line (50) leads to the inlet portion of auxiliary pump casing (43), see column 3, lines 5-14).

In Reference to Claim 4

Carpenter teaches the pump according to claim 3 (see the rejection of claim 3 above), characterized in that the draw-off location is located in a low- pressure pump body, upstream of the low-pressure outlet. The draw off location (6") is located in the discharge portion (6) of the lower pressure main pump (2), upstream of the primary portion (6') by which the fluid is discharged (see figure 1).

In Reference to Claim 6

Carpenter teaches the pump according to claim 4 (see the rejection of claim 4 above), characterized in that the circulation of the water pumped by the second pump impeller is carried out in a cylindrical space formed around the motor, between the motor and an external housing. Since the motor is cylindrical and lies inside a

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cylindrical housing, the fluid flowing around it would be cylindrical in shape, since it would conform to its surroundings.

In Reference to Claim 11

Carpenter teaches the pump according to claim 2 (see the rejection of claim 2 above), characterized in that the water pumped by the second pump impeller is drawn off close to the outlet of the first pump impeller (it is drawn off from high pressure portion (6) via secondary portion 6" which leads to recirculation line (50), see figure 1) and returns to the inlet of the second impeller (recirculation line (50) leads to the inlet portion of auxiliary pump casing (43), see column 3, lines 5-14).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter in view of U.S. Patent 5,392,473 to Idland et al. (Idland et al.).

Carpenter teaches the pump according to claim 4 (see the rejection of claim 4 above), and that the fluid pumped by the second pump is used to cool the motor. Carpenter does not teach that the fluid is carried in a coiled pipeline which surrounds the motor.

Idland et al. teach a metallic tube (40) wound about a pump drive motor (45) which receives heat from the motor in order to heat the water for use in a tub (11) (see figure 2). It would have been obvious to one of ordinary skill in the art at the time of invention to circulate the fluid from the impeller of Carpenter around the motor of Carpenter in coiled tubing as taught by Idland et al. so that the fluid would not actually contact the motor, which would allow the fluid to flow without obstruction and would ensure that the motor would not be damaged by the fluid.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter in view of U.S. Patent 5,049,770 to Gaeth et al. (Gaeth et al.).

In Reference to Claim 7

Carpenter teaches a pump according to claim 6 (see the rejection of claim 6 above), but do not teach that the body of the low pressure pump is releasable from the motor, the housing, and the impellers,

Gaeth et al. teach a pump where the impeller body (impeller housing (14)) is releasable from the motor (electric motor assembly (22)), housing (mounting plate (12) and silencer housing (16)), and pump impellers (impeller (108)) (see column 7, lines 5-36). It would have been obvious to one of ordinary skill in the art at the time of invention to make the low pressure impeller housing of Carpenter releasable from the motor, housing and impellers as taught by Gaeth et al. in order to allow the impeller to be easily replaced or serviced.

In Reference to Claim 8

Carpenter as modified by Gaeth et al. teaches a pump according to claim 7 (see the rejection of claim 7 above), characterized in that the releasable connection between said assembly and the low-pressure pump body is carried out by means of bayonet-type locking (lock recesses (127) mate with lock arms (130) in the bayonet style, see column 7, lines 5-36).

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carpenter in view of U.S. Patent 3,822,754 to Henkin et al. (Henkin et al.).

In Reference to Claim 9

Carpenter teaches the pump according to claim 1 (see the rejection of claim 1 above), but does not teach that the impeller is used for filtering and cleaning a swimming pool.

Henkin et al. teach a pool filtering and cleaning system (see figure 1) where the filter is driven by a low pressure main pump body (22) and the cleaning apparatus (30) is driven by a high pressure booster pump (70) which is in communication with the main pump (see column 3 lines 39-50, column 4 lines 40-47, and column 6 lines 55-60). It would have been obvious to one of ordinary skill in the art at the time of invention to use the pump of Carpenter in the pool filtering and cleaning device of Henkin et al. since Henkin et al. do not specify the type of pump used or disclose how the main pump is connected to the booster pump. Using the pump of Carpenter would allow a single pumping unit to be utilized for both the filter and the cleaning apparatus, which would simplify the system.

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In Reference to Claim 10

Carpenter as modified by Henkin et al. teaches the pump according to claim 1 (see the rejection of claim 1 above), characterized in that the low-pressure pump body is incorporated in a concrete block (it is contained in a concrete wall (14), see column 3 lines 29-32) which also contains a water filtration device for swimming pools (pump and filter (22), see figure 1).

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA L. MYERS whose telephone number is (571)270-5059. The examiner can normally be reached on Monday through Friday, 8:30am to 5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Bomberg can be reached on 571-272-4922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JLM

/Thor S. Campbell/

Primary Examiner, Art Unit 3742